

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

CONDITIONAL MAJOR / SYNTHETIC MINOR, FINAL PERMIT No. F-05-036 R3
KENTUCKY CABINET CORPORATION
CORBIN KY.

DECEMBER 18, 2007
MARK LABHART, REVIEWER
SOURCE I.D. #: 021-125-00107
SOURCE A.I. #: 74649
ACTIVITY #: APE20070004

MINOR PERMIT REVISION, F-05-036 R3: ADDITION OF A SPRAY BOOTH, COATING OVEN, AND THE RELOCATION OF EXISTING SPRAY BOOTHS:

The source is adding (1) spray booth to the facility, converting an existing manual spray booth to an automatic topcoating booth, and relocating (2) other existing booths. These modifications will create a second coating line, except that topcoating for both lines will take place in the proposed automatic machine. The creation of the second coating line is necessary to handle larger cabinet components. Due to this proposed modification, the coatings applied in the existing spray booths will change as reflected in the description for each booth. This is not a change in the coating materials used by the source, rather a change in the location of where these coatings are applied.

The Division is also using this opportunity to revise the list of wood working equipment in response to the addition of and replacement of equipment approved by the Division on June 6, 2007 under 401 KAR 52:030, Section 17, Off-Permit and Section 502(b)(10) Changes. New requirements are being added to the permit

MINOR PERMIT REVISION, F-05-036 R2: ADDITION OF (3) SPRAY BOOTHS:

The source adding (3) spray booth to the facility, (EP6, EP7 and EP8). Two of the proposed coating booths will be located on, or as a part of the existing coating line served by a monorail system. The third booth will be an off-line booth for touchup and repair. The (2) new online booths will be used for top coating, and as a result of this addition, some of the existing booths will be designated for other coating operations. There are some changes in the coating materials being used sourcewide which are reflected in the KYEIS with this revision. Actual emissions are estimated to remain below major source limits; therefore no change in the existing emission limitations was requested with this addition. No changes are necessary to the existing permit required monitoring, recordkeeping, or reporting. Dry filters will be used for particulate control from the new spray booths, the same as the existing spray booths. Also the permittee will track coating usage to determine the sourcewide VOC and HAP emissions as is currently being done for the existing spray booths.

MINOR PERMIT REVISION, F-05-036 R1: INSTALLATION OF A BAGHOUSE:

The source is changing the particulate filtration system used for the woodworking processes. Currently, there are multiple small dust collecting units which exhaust into the building enclosure. These smaller filters are to be replaced by a single large baghouse to be located outside of the building. The new baghouse will exhaust directly to the ambient air, however the new collection system is considered to be more efficient than the smaller portable units, resulting in a reduction in the PTE for particulates of 11.2 TPY.

SOURCE DESCRIPTION, F-05-036:

Kentucky Cabinet Corporation, located in Corbin Kentucky, manufactures kitchen and bath cabinetry. This is a new source, beginning operation in 2004. Currently, the facility has only woodworking equipment. The source is planning the addition of gluing and finishing operations with this permit action. The pollutants of concern are particulate matter, VOC and HAP. Particulates from the woodworking operations are controlled by a baghouse. The planned adhesive is a low VOC and HAP product. The majority of the VOC and HAP will be emitted from 3 spray booths used for finishing operations. Potential emissions of VOC and HAP are greater than major source thresholds, but Kentucky Cabinet Corp. has requested Federally Enforceable Limits on the potential to emit.

COMMENTS:

- Emission factors for the woodworking operation were provided by the consultant. These factors were compared against emission factors previously used by the Division for woodworking operations, and they were found to be comparable.
- Dust collection is integral to woodworking operations hence the baghouse will always be in operation whenever woodworking is occurring. Collection efficiency is assumed to be 99%.
- VOC and HAP emissions calculated by material balance.
- Federal regulation 40 CFR 63, Subpart JJ—National Emission Standards for Wood Furniture Manufacturing Operations is not applicable because of the conditional major limitations. Subpart JJ is applicable to major sources only.
- The Screen 3 dispersion model was used to estimate pollutant concentrations for all HAP emitted from this source. All predicted concentrations were below the EPA's Prioritized Dose Response Values, (PDRVs) for each HAP emitted.

EMISSION AND OPERATING CAPS DESCRIPTION:

Kentucky Cabinet Corporation has requested voluntary permit limits of less than 9.0 tons per year of individual hazardous air pollutants (HAP), less than 22.5 tons per year of combined HAPs, and less than 90 tons per year of VOC.

PERIODIC MONITORING:

Kentucky Cabinet Corporation shall report VOC and HAP emissions semiannually.

OPERATIONAL FLEXIBILITY:

The source is not restricted as to hours of operation or quantity of product produced while remaining within the caps above.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.